

The Use and Effectiveness of the VDT™: Implications for Caregivers and Professionals

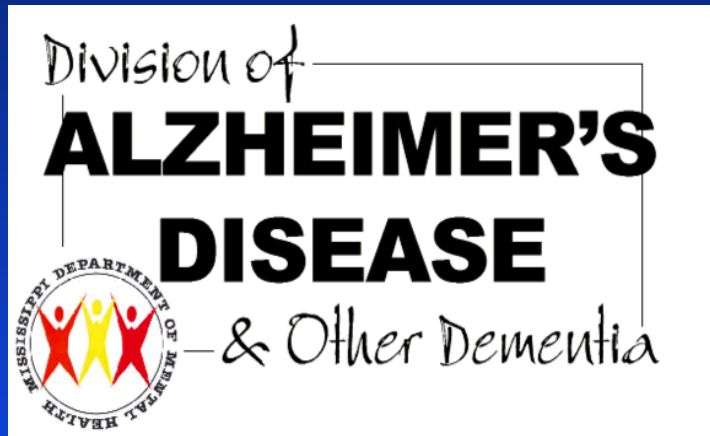
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Anna Stevens, LSW and other DSU students who experienced and used the VDT in the community and assisted DSU in the VDT research.

Project Partners



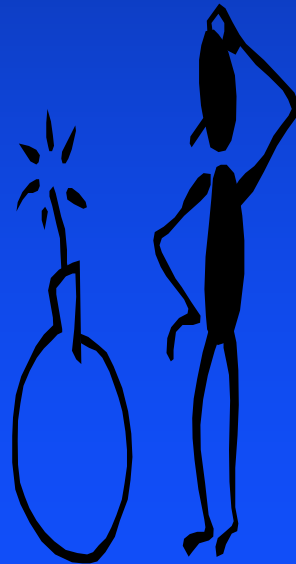


Dementia

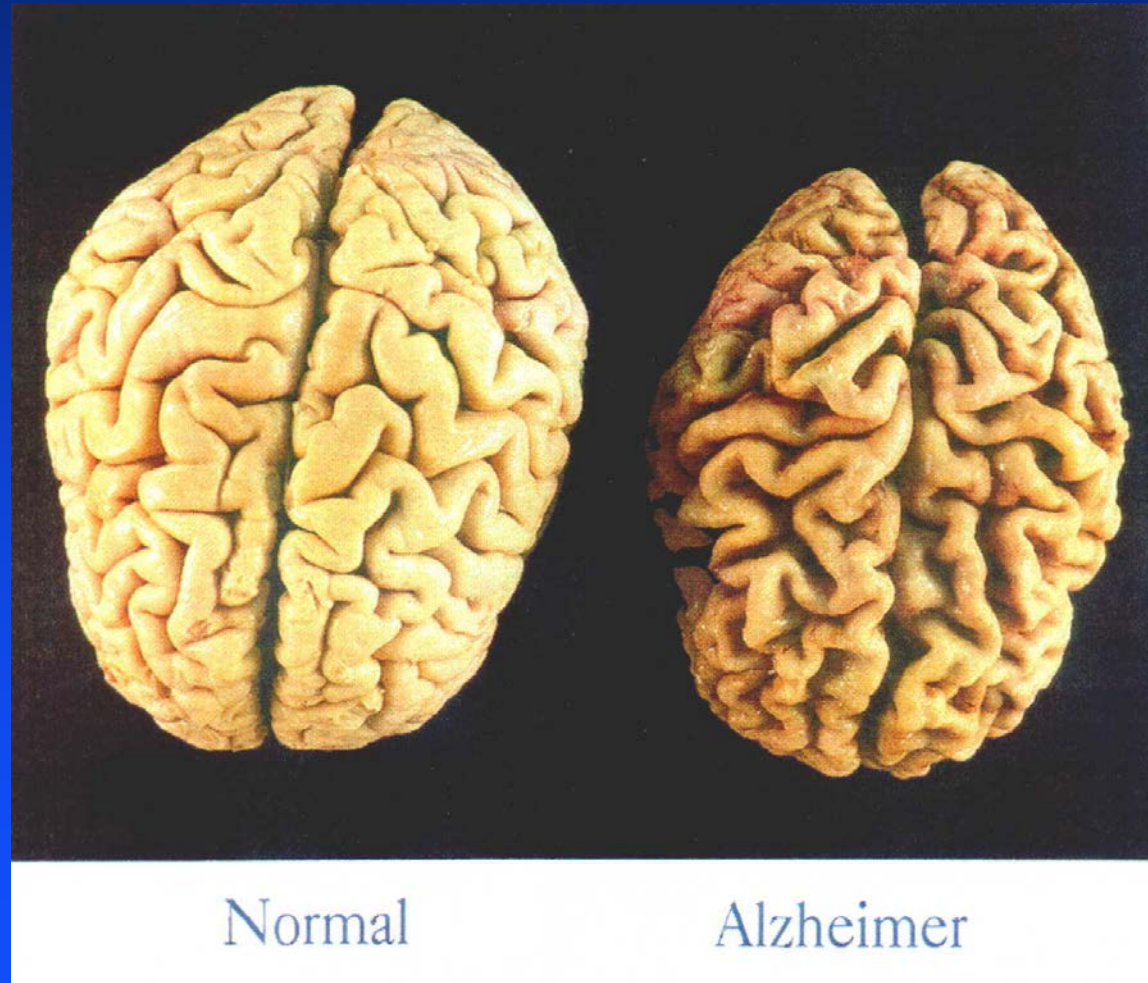
- Dementia is the loss of mental functions involving thinking, memory, reasoning, and language to such an extent that it interferes with a person's daily living.
- Dementia is a group of symptoms that includes:
 - ◆ Language disturbances
 - ◆ Problematic behaviors
 - ◆ Difficulties with activities of daily living
 - ◆ Personality changes

Cognitive Functions

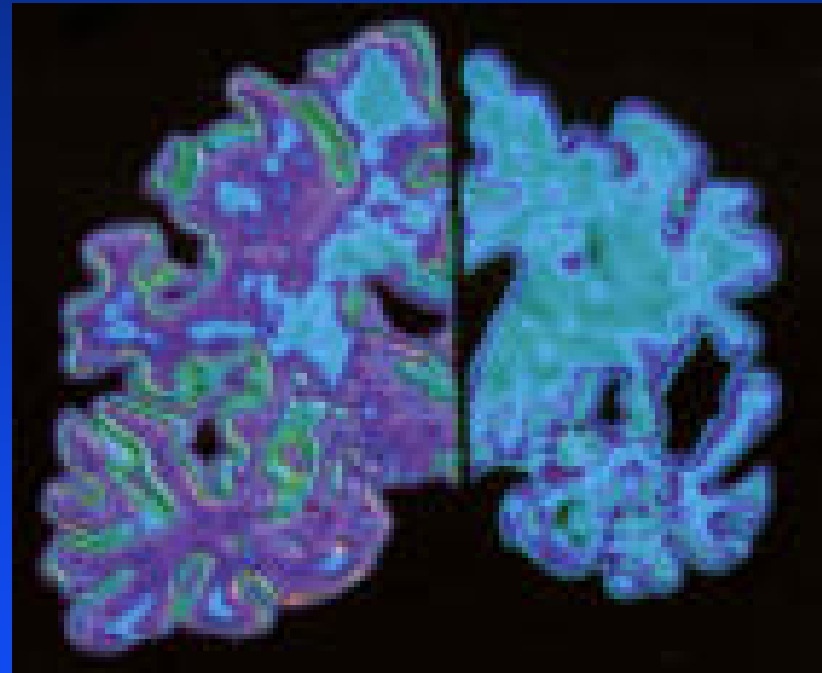
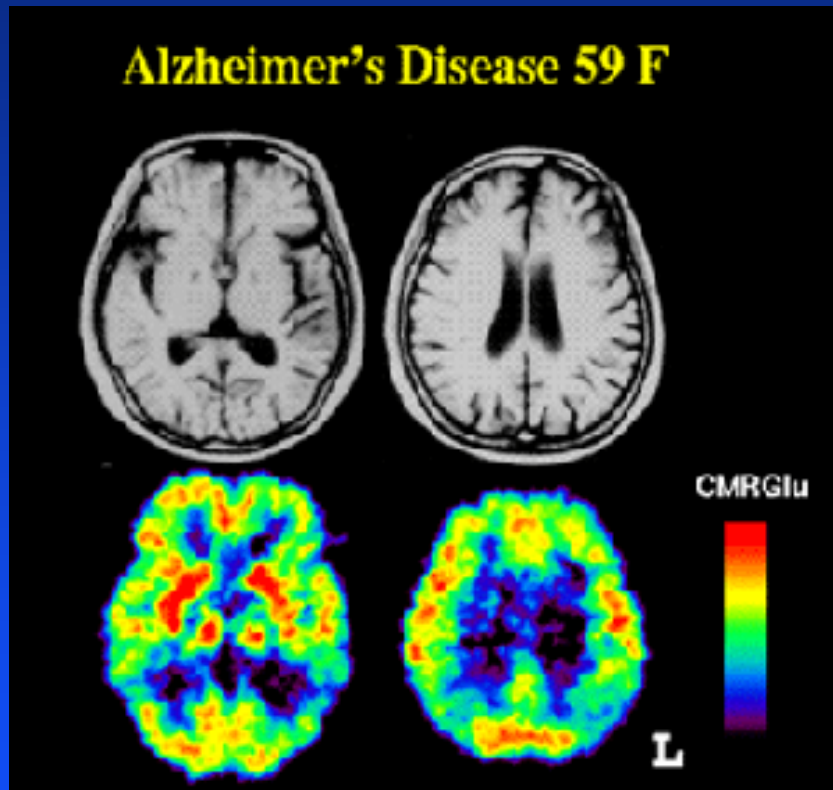
- Memory
- Orientation
- Language
- Judgment
- Perception
- Attention
- Ability to perform tasks in sequence



Normal vs. Alzheimer Brain

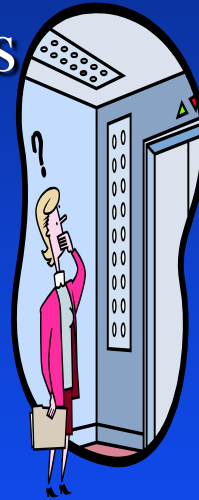


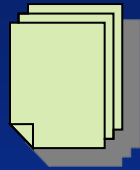
PET Scans



Behavioral Symptoms

- Agitation and restlessness
- Repetitive questions
- Wandering
- Physical and verbal aggression
- Shadowing
- Sundowning
- Screaming and yelling
- Inappropriate sexual conduct
- Hoarding, rummaging and “stealing”
- Disrobing and dressing inappropriately
- Resistive behavior
- Catastrophic reactions





Updated Statistics

- Alzheimer's Disease currently affects more than **5.4 million** Americans. 5.2 million are 65 years or older. About 4% have early onset A.D. and are younger than 65. 46% are older than 85
- Although A.D. is **not a normal part of aging**, the risk of developing the illness rises with age. Current research from the National Institute on Aging indicates that **the prevalence of A.D. doubles every 5 years beyond age 65.**
- An estimated **1 in 8 persons aged 65 and older has A.D.**
- A.D. is the **6th leading cause of death** in the U.S.
- **More women than men** develop A.D. since women “on average” live longer than men

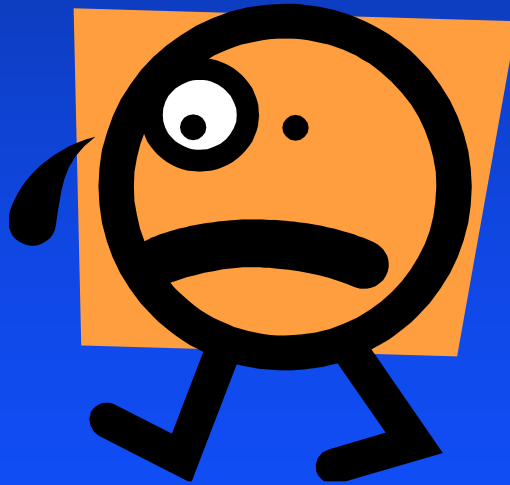
Additional Facts



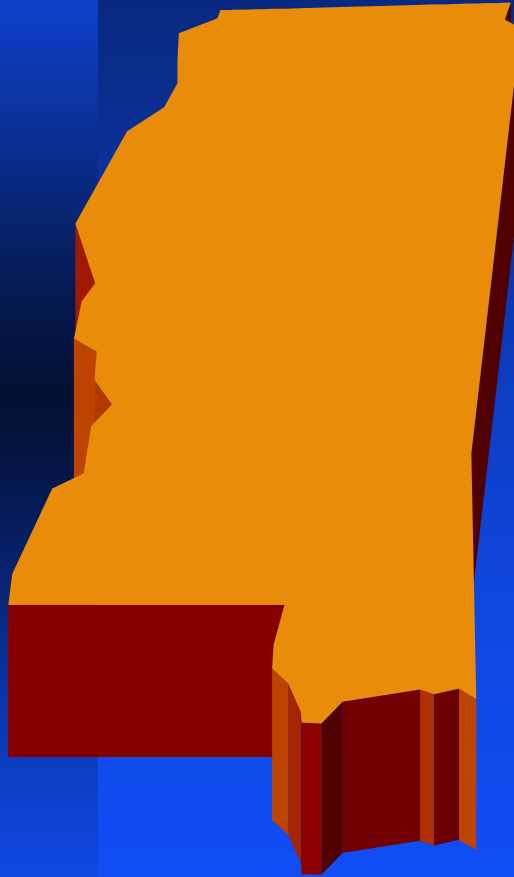
- It is estimated that **1-4 family members serve as caregivers** for each individual with A.D.
- A.D. places **tremendous emotional and financial stress** on families. 50% of caregivers die before their A.D. loved one.
- 61% of the caregivers of A.D. patients rated the emotional stress of care provision as “very high.”
- **33% of caregivers of A.D. patients reported symptoms of depression.**
- **54% of caregivers reported financial strain.**

Caregiver Frustrations

- If you are a caregiver for someone with A.D., what are some of your frustrations?



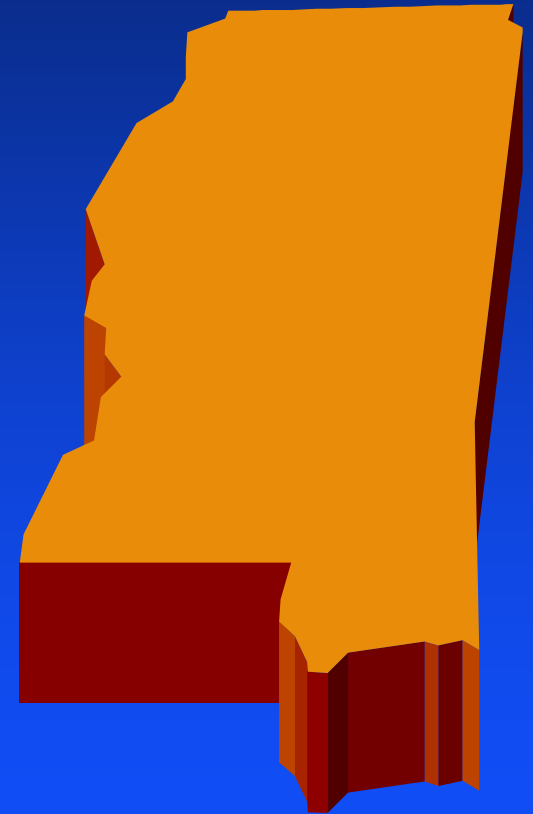
Alzheimer's in Mississippi



- Approximately 53,000 Mississippians have Alzheimer's in 2012
- MS has about 343,523 residents age 65 or older (21% of pop.), Compared to 54,000 in 1900
- The number of adults age 65+ in MS will jump to an estimated 65,000 by the year 2025 up from 4% to 27%.

Risk Factors in Mississippi

- MS has the highest rate of Diabetes Type II in USA
- High cholesterol, high blood pressure & obesity may increase chance of AD
- The African-American population is underserved yet has a higher rate of Diabetes than rest of the state population.
- African-Americans and Hispanics are at a greater risk.
- African-Americans are 2 times as likely to develop AD Caucasians
- Hispanics are 1.5 times as likely to develop AD than Caucasians





Costs of Dementia

- Dementia costs companies about \$61 billion per year according to the Alzheimer's Association.
- Of this, \$24.6 billion covers healthcare costs and \$36.5 billion covers costs related to caregiver role conflicts with work which results in lost productivity, absenteeism, and worker turnover/replacement.

Caregiving for Dementia

- About 7 of 10 A.D. patients live at home
- Friends and family provide 75% of their care.
- When family is no longer able to provide total care, outside resources are sought for assistance, including Home Health & Homemaker Services.
- When home care becomes difficult or unbearable, the family considers moving the patient into Long Term Care.

Caregiver Issues

Caregiving for A.D. patients is extremely difficult.
Many caregivers suffer from:

- Burnout
- Depression
- Anger
- Frustration
- Financial Problems
- Guilt
- Lack of Training
- Lack of Social Support

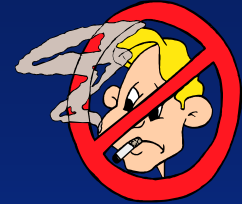


Elder Abuse



- When caregivers experience these symptoms and are not trained to provide care, they are more likely to abuse the elder.
- According to the National Center of Elder Abuse, 2.1 million elders are victims of abuse.
- This number is an under-representation since most elders do not report the abuse, especially if they are dependent on the person who is abusing them.

Elder Abuse Prevention



- Experts agree that education and training are the best ways to prevent elder abuse
- Caring for dementia patients requires empathy, patience, and special care
- People are more helpful when they identify with others or share similar experiences
- ***HOW CAN PEOPLE BE EMPATHETIC WHEN THEY HAVE NEVER EXPERIENCED DEMENTIA OR OLD AGE?***
- Sensitivity training using the VDT increases empathy and understanding of Dementia and helps prevent and/or decrease elder abuse



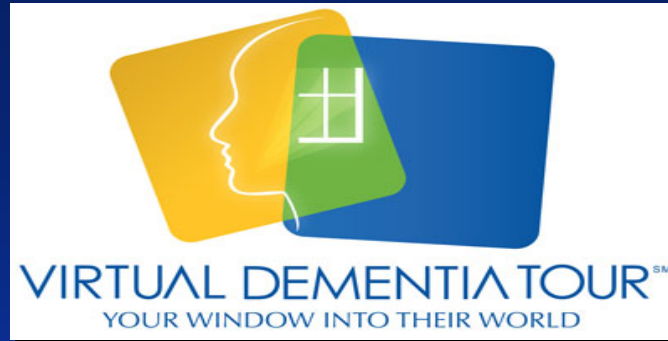
Sensitivity Training

- Sensitization to the experiences of others is a form of respect
- For social workers and other health care professionals, sensitization to others is important since Codes of Ethics emphasize the worth and dignity of all human beings
- Sensitization results in increased empathy and a better understanding of needs
- Sensitization is essential to the provision of quality care for patients at home and in other settings

How Can We Sensitize Caregivers and Professionals to A.D. and the Needs of A.D. Patients?

- By using the Virtual Dementia Tour™
- The VDT allows participants to get a glimpse of what it is like to have A.D. for 10 minutes.





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The Virtual Dementia Tour™ (VDT)



- The VDT was designed by PK Beville of Second Wind Dreams to educate and sensitize health care workers and caregivers by simulating what is known about the effects of Dementia on a person.
- Participants complete a pretest, are specially garbed, and then are asked to complete 5 tasks in a specially prepared room. The garb and room are designed to simulate dementia.
- After the 10 minute VDT, participants remove the garb, take a posttest, and are debriefed.

Simulating Dementia with the VDT



- Popcorn in participant's shoes simulates foot pain that often accompanies poor circulation, neuropathy, and arthritis.
- Popcorn in latex gloves put on participant's hands simulates the loss of sensory and fine motor skills.
- Tape on the participant's fingers simulates the loss of functioning and decreases in sensitivity to touch, injury, and hot and cold
- Special goggles simulate the yellowing and thickening of the lens. The black dot on the goggles simulates age-related macular degeneration. Goggles also impair peripheral vision which is damaged as the occipital lobe of the brain is deteriorated by Dementia.

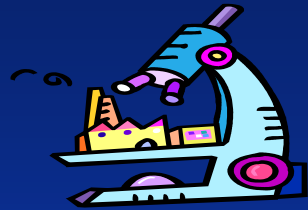
Simulating Dementia using the VDT



- Headphones and CD players simulate the hearing impairment and confusion of dementia. Dementia patients have trouble discriminating sounds and report a buzzing sound in their heads.
- Environmental manipulations including dimmed lights, flashing lights, and other distractions simulate the problems Dementia patients face coping with the environment.

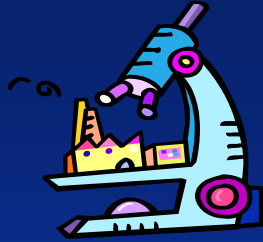
VDT Facts

- The VDT is a scientifically proven method of training created for caregivers of A.D. patients who strive to provide better care.
- Learning to create a positive environment for A.D. patients can only come by attempting to walk in their shoes and understand the disease.
- The VDT helps caregivers understand the challenges of A.D. so their loved ones' needs can be met by creating a better environment.



Observing the VDT

- For those who have not experienced the VDT, we want to show you what it is like.
- Before we let you watch the VDT, please take a minute to complete the VDT pre-test.
- As you watch the *ABC News* clip, jot down some of the participant's responses. How did the VDT make the caregiver feel? The ABC News correspondent?



Your Observations

- Please take a minute and complete the VDT posstest.
- How did it feel for you to watch the *ABC News* clip of the VDT?
- How might you react if you were an actual VDT participant?
- Let us tell you about how others commonly react to the VDT:

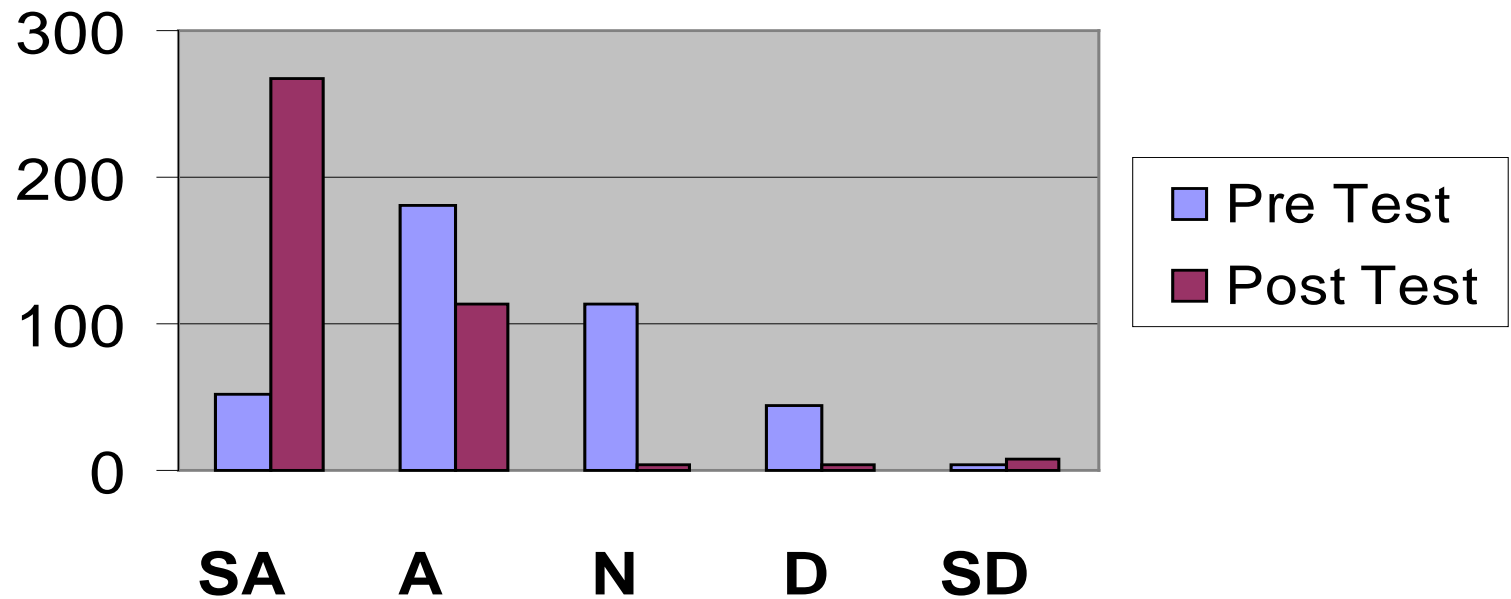
Our Study



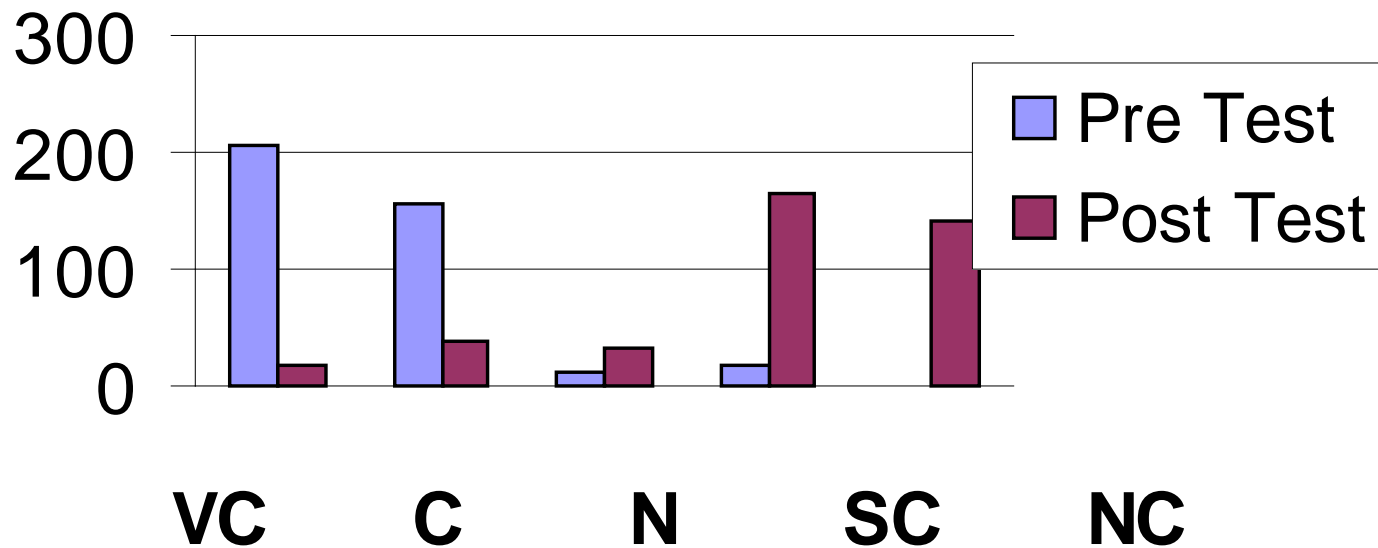
- Using a quasi-experimental research design, we compared the pre and posttests of over 800 DMH, DSU, and community VDT participants since 2008.
- The tests were divided into either a matched pairs sample or a non-matched pairs sample. Both samples were analyzed to test for A.D. sensitivity.
- Parametric and nonparametric statistical analyses indicated that with both samples, the means of the posttests were significantly different than the pretest means (.000 @ $p < .05$) indicating that **the VDT was an effective tool in sensitizing care providers about Dementia**. The means were not different by chance so the Null hypotheses ($H_0 = 0$; $H_R \neq 0$) that VDT would not make a difference in participant sensitivity was rejected.

The Matched Sample Results

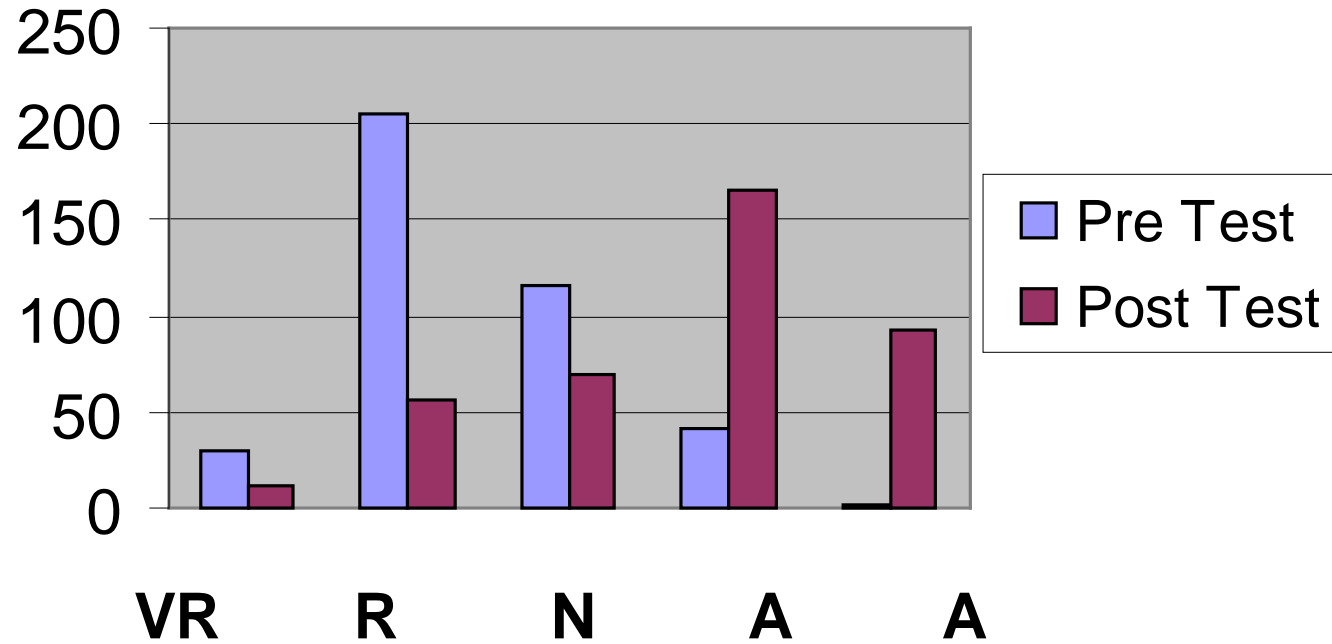
Do you understand the emotional needs of Dementia?



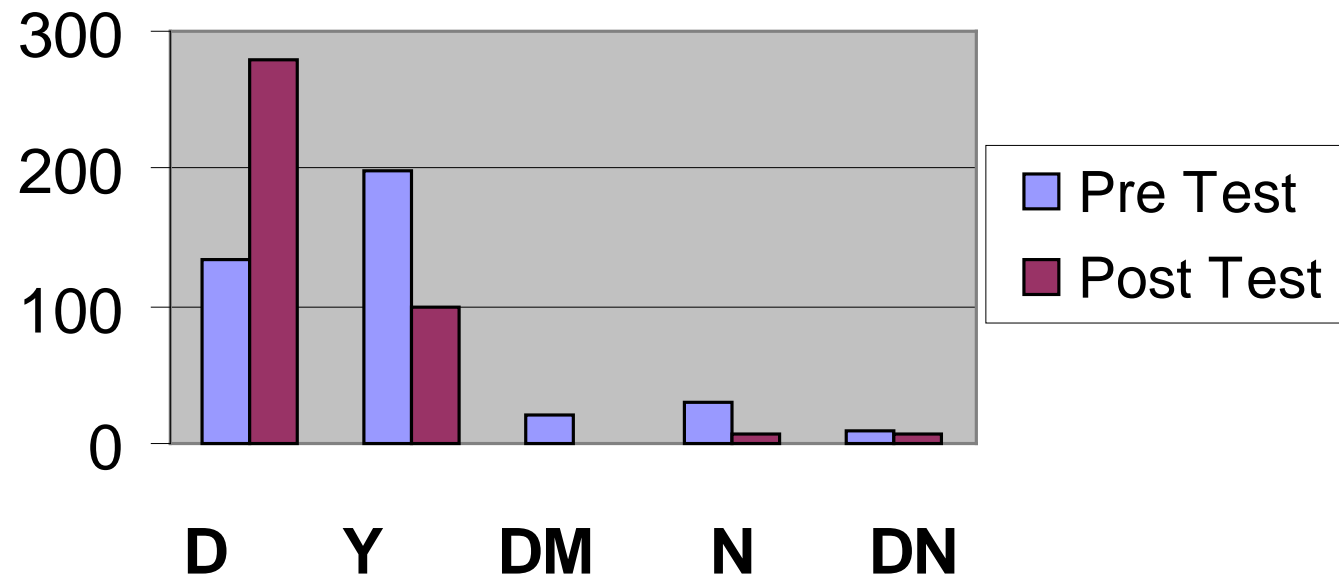
**From a physical standpoint,
how capable did you feel of
carrying out simple tasks?**



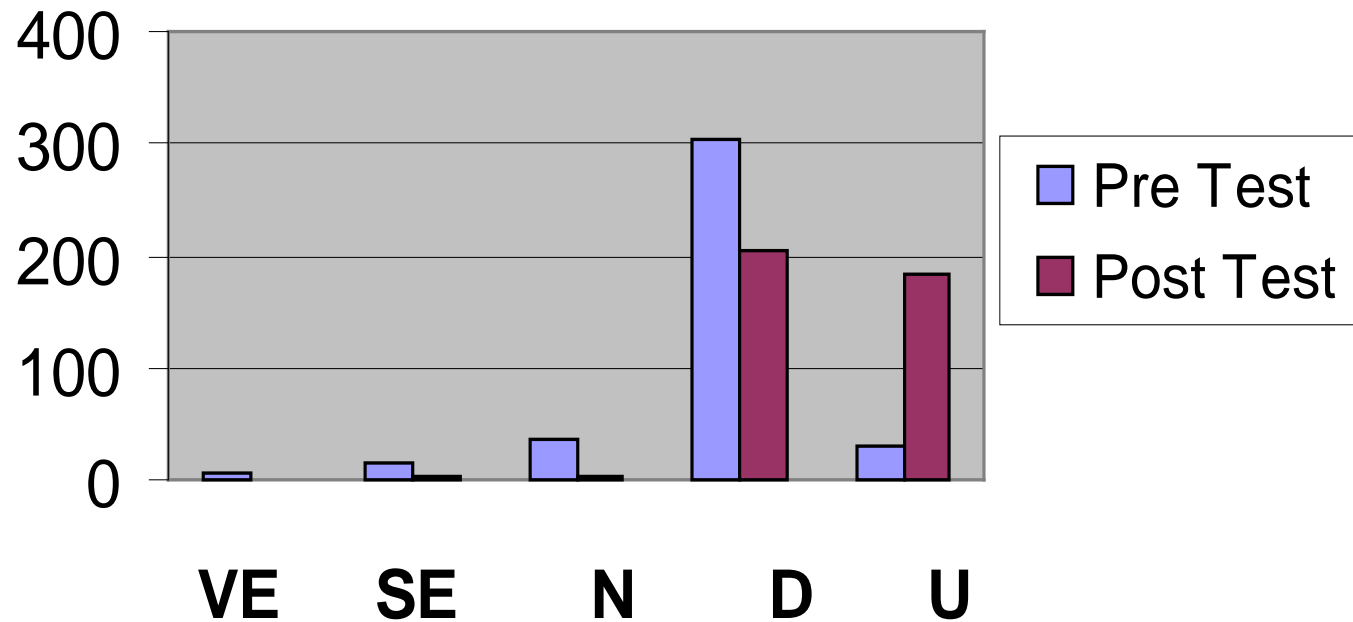
What is your current state of relaxation?



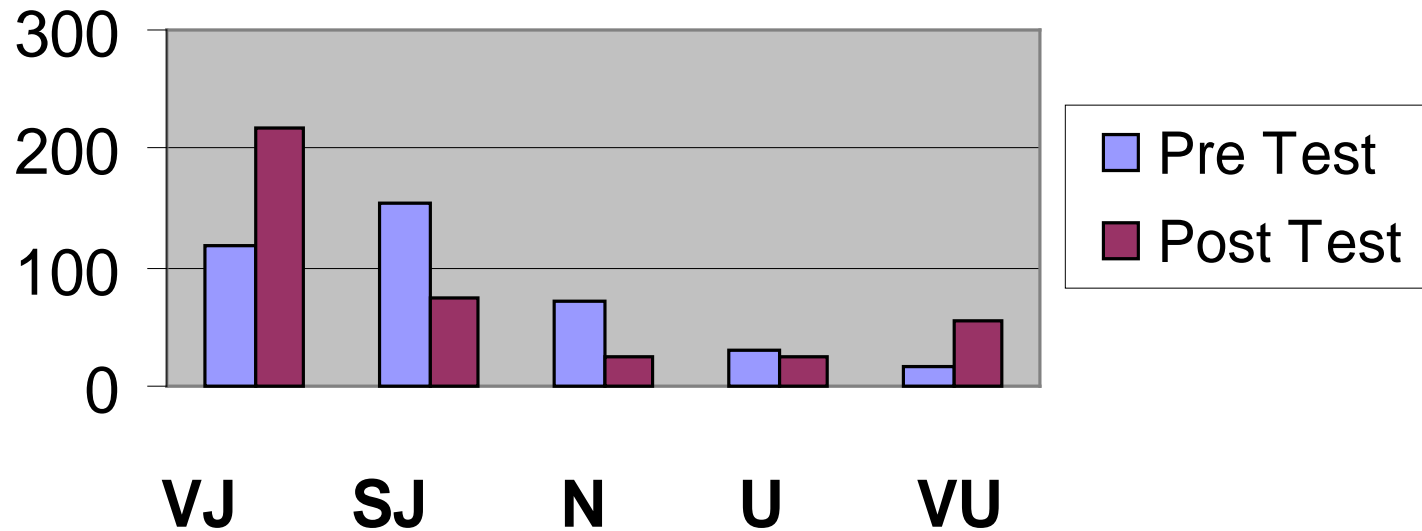
Is it necessary to sensitize yourself to our elders to provide good care?



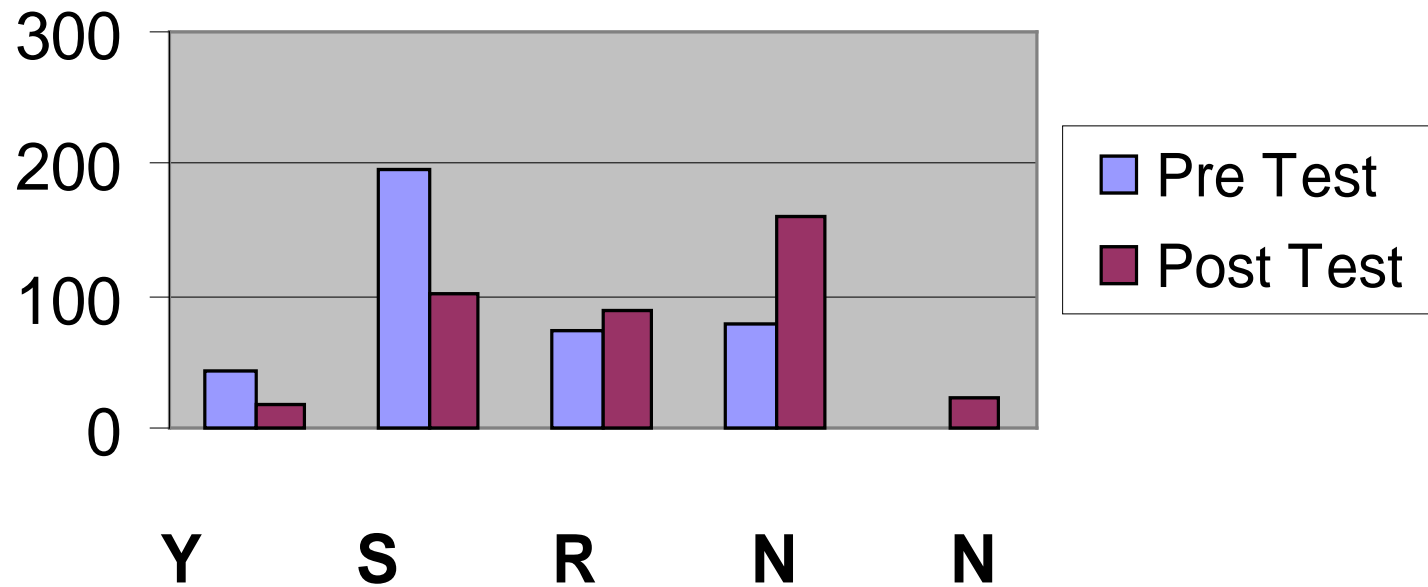
How easy is it for a person with Dementia to get through the day?



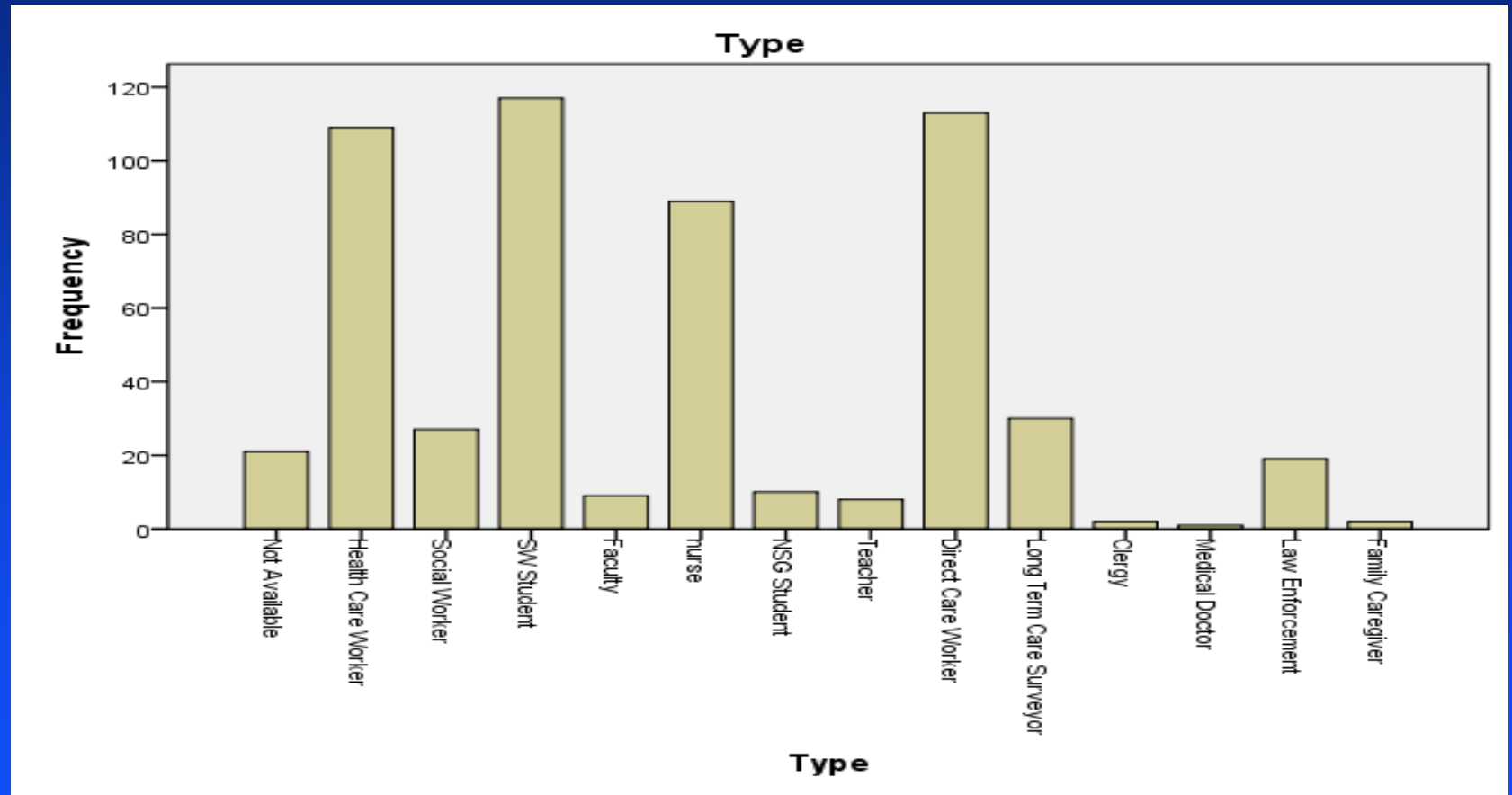
How justified are people with Dementia when they exhibit inappropriate behaviors?



Do people with Dementia get the care they need?



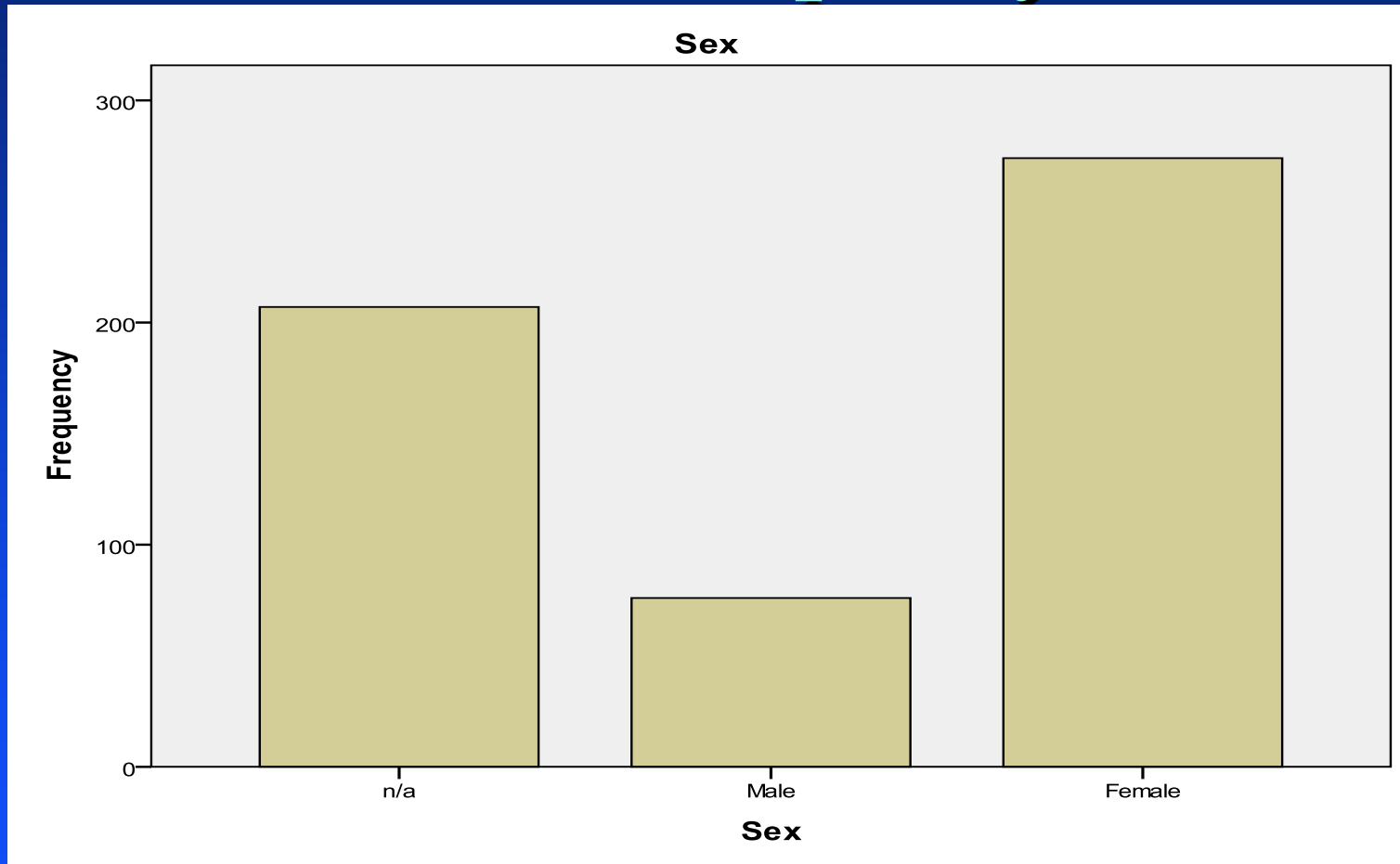
Matched Pair Sample by Type



Matched Pair Sample Types by Frequency & Percentage

■ Type Not Available	21	3.2%
■ Health Care Worker	109	16.8%
■ Social Worker	27	4.2%
■ Social Work Student	117	18%
■ Faculty	9	1.4%
■ Nurse	89	13.7%
■ Nursing Student	10	1.5%
■ Teacher	8	1.2%
■ Direct Care Worker	113	17.4%
■ Long Term Care Surveyor	30	4.6%
■ Clergy	2	.3%
■ Law Enforcement Officer 2.9%	19	2.9%
■ Family Caregiver	2	.3%
■ Medical Doctor	1	.2%
■ Total	649	100%

Matched Pair Sample by Gender



Matched Pair Sample Gender by Number & Percentage

■ Gender Not Available	207	37.2%
■ Male	76	11.7%
■ Female	274	49.2%

Things participants said during the VDT.....???!!!

- Oh my goodness!
- OMG! I can't see!
- I can't find anything....
- “Am I supposed to fix the bed?”
- I don't know what else to do!
- H*#@ no!

Things they did during the VDT....????!!!!!!

- Crawled on floor
- Sat in chair, rocking back and forth, screaming “Momma!”
- Just stood there....
- Cursed, panicked
- Destroyed room

Common Behaviors

■ Left room or removed garb	9%
■ Negative	24%
■ Sub Vocalizations	33%
■ Request for help/stop	25%
■ Interact with others	28%
■ Inappropriate behaviors	6%
■ Agitation	22%
■ Shadowing	9%
■ Doing other person's tasks	42%
■ Wandering	44%
■ Hoarding	8%



VDT Effects

- If participants could hardly bear only 10 minutes of a Dementia simulation, think of how dementia patients feel!
- Participants could remove their garb and leave the VDT, but Dementia patients experience similar symptoms, feelings, and frustration 24/7!



How the VDT affected participants....

- Felt disabled and helpless
- Gained a better understanding of why behaviors exist in dementia residents
-the caregiver's response, "it's OK, you're doing well".... ANNOYING!!
- Felt very alone and lost.....it's scary....
- The confusion was almost embarrassing...wanted to be normal again
- Felt unnoticed.... No one helped-it was like I was invisible
- New appreciation for my mother who has Alzheimer's



Changes Resulting from the VDT Experience

- Have more patience, compassion, and understanding.
- Be thankful for and take care of our minds and bodies
- Speak slowly and clearly when speaking with persons with Dementia
- Give simple directions with only a few steps
- Repeat directions often
- Provide more assistance
- Reduce environmental noise
- Order the environment and don't change it--keep it the same



Using the VDT in the Community

- Educates caregivers and care providers about aging and Dementia
- Increases empathy
- Sensitizes them to the needs of older adults
- Prepares them for experiences with older adults
- Prepares them for personal experiences with persons with Dementia
- Gives them information so they can educate others



Benefits of the VDT

- Increases sensitivity and empathy toward A.D.
- Decreases caregiver anxiety because it increases understanding.
- Decreases caregiver frustration and depression because the caregiver knows what is happening to the A.D. patient is **NOT THEIR FAULT**.
- Reduces caregiver stress

Environmental Adjustments



- The VDT can improve care giving.
- It indicates to caregivers what the A.D. patient needs to live each day with the disease.
- It gives us clues about how to adjust the environment to better meet patient needs.
- What do you think caregivers can/should do on a daily basis to help A.D. patients?

Who Needs the VDT?

- Caregivers
- Care Providers: Doctors, Nurses, CNAs, Social Workers, etc.
- Everyone who knows, loves, and works with a person with A.D.!



For more information:



■ www.secondwind.org



VDT Availability

- Second Wind Dreams sells VDT kits for institutions and for families.
- The Individual Family Edition (VDT-I) costs \$100 plus shipping.
- The Group Edition (VDT-G) costs \$400.00 plus shipping.
- www.secondwind.org





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